

IN THE CLAIMS:

Please amend claim 23 as shown in the complete list of claims that is presented below.

Claim 1 (cancelled).

2. (previously presented) The method of claim 19 wherein the spatial light modulator comprises a liquid crystal display.

3. (previously presented) The method of claim 19, wherein the spatial light modulator comprises a digital micromirror device.

Claim 4 (cancelled).

5. (previously presented) The method of claim 22, wherein the light has an intensity at one moment that is at least about twice its intensity at another moment.

6. (previously presented) The method of claim 22, wherein the spatial light modulator comprises a liquid crystal display.

7. (previously presented) The method of claim 22, wherein the spatial light modulator comprises a digital micromirror device.

8. (previously presented) A method for displaying an image described by video words of a frame, the video words having bits with different bit ranks, said method comprising the steps of:

(a) for each bit rank, turning pixels of a digital micromirror device on or off in accordance with values of the video words for the respective bit rank; and

(b) discontinuously exposing the digital micromirror device to brief-duration flashes of light, the flashes having intensities that depend on the respective bit rank,

wherein step (b) comprises exposing the digital micromirror device to flashes impinging on the digital micromirror device from a first direction, and also to flashes impinging on the digital micromirror device from a second direction, and also to flashes impinging on the digital micromirror device from a third direction.

Claims 9 and 10 (cancelled).

11. (previously presented) The method of claim 8, wherein some of the flashes are emitted from a red light source, others of the flashes are emitted from a green light source, and still others of the flashes are emitted from a blue light source.

Claim 12 – 17 (cancelled).

18. (previously presented) The method of claim 19, wherein the first color component is a red component.

19. (previously presented) A method for displaying a first color component of an image described by video words for the first color component of a frame, the video words having bits with different bit ranks, said method comprising the steps of:

(a) for each bit rank of the first color component of the frame, turning pixels of a spatial light modulator on or off in accordance with values of the video words of the first color component for the respective bit rank;

(b) steadily exposing the spatial light modulator to light of the first color component during substantially the entire time that step (a) is conducted, the light being generated by a light source; and

(c) driving the light source at a first energy level for one of the bit ranks and at a substantially greater second energy level for another of the bit ranks,

wherein the light source comprises a plurality of light emitters, and

wherein step (c) comprises turning on less than all of the light emitters to drive the light source at the first energy level and turning on all of the light emitters to drive the light source at the second energy level.

20. (previously presented) The method of claim 19, wherein step (c) further comprises detecting light emitted by the light source, integrating the detected light, and changing from the first energy level to the second energy level when the integrated light reaches a predetermined value.

21. (previously presented) The method of claim 22, wherein the first color component is a red component.

22. (previously presented) A method for displaying a first color component of an image described by video words for the first color component of a frame, the video words having bits with different bit ranks, said method comprising the steps of:

(a) for each bit rank of the first color component for a plurality of rows of the frame, turning pixels of a spatial light modulator on or off in accordance with values of the video words for the respective bit rank; and

(b) substantially steadily exposing the spatial light modulator to light that varies substantially in intensity while step (a) is conducted,

wherein step (b) comprises shining light generated by a light source onto the spatial light modulator, the light source having a plurality of light emitters, and actuating at least one of the light emitters substantially continuously as step (a) is being conducted and turning at least one other of the light emitters on or off as step (a) is being conducted.

23. (currently amended) The method of claim 4, A method for displaying a first color component of an image described by video words for the first color component of a frame, the video words having bits with different bit ranks, said method comprising the steps of:

(a) for each bit rank of the first color component for a plurality of rows of the frame, turning pixels of a spatial light modulator on or off in accordance with values of the video words for the respective bit rank; and

(b) substantially steadily exposing the spatial light modulator to light that varies substantially in intensity while step (a) is conducted,

wherein step (b) comprises shining light generated by a light source onto the spatial light modulator, detecting the light, integrating the detected light, and changing the intensity of the light generated by the light source when the integrated light reaches a predetermined value.

Claims 24 and 25 (cancelled).

26. (previously presented) The method of claim 29, wherein the spatial light modulator comprises a liquid crystal display.

27. (previously presented) The method of claim 29, wherein the spatial light modulator comprises a digital micromirror device.

28. (previously presented) The method of claim 29, wherein the first color component is a red component.

29. (previously presented) A method for displaying a first color component of an image that is generated by a spatial light modulator having pixels in rows, the first color component of the image being described by video words for the first color component, said method comprising the steps of:

(a) for a first one of the bit ranks of the video words for the first color component, turning pixels in a plurality of the rows of the spatial light modulator on or off in accordance with values of the video words for the first one of the bit ranks;

(b) for a second one of the bit ranks of the video words for the first color component, turning pixels in said plurality of rows of the spatial light modulator on or off in accordance with values of the video words for the second one of the bit ranks; and

(c) steadily exposing the spatial light modulator to light of the first color component while steps (a) and (b) are conducted, the light having an intensity that changes substantially while steps (a) and (b) are being conducted,

wherein step (c) comprises shining light generated by a light source onto the spatial light modulator, the light source having a plurality of light emitters, and actuating at least one of the light emitters substantially continuously as steps (a) and (b) are being conducted and turning at least one other of the light emitters on or off as steps (a) and (b) are being conducted.

30. (previously presented) The method of claim 29, wherein step (b) comprises shining light generated by a light source onto the spatial light modulator, detecting the light, integrating the detected light, and changing the intensity of the light generated by the light source when the integrated light reaches a predetermined value.

31. (previously presented) A method for displaying a first color component of an image that is generated by a spatial light modulator having pixels in rows, the first color component of the image being described by video words for the first color component, said method comprising the steps of:

(a) shining light of the first color component on the spatial light modulator, the light being generated by a light source;

(b) for a first one of the bit ranks of the video words for the first color component, turning pixels in a plurality of the rows of the spatial light modulator on or off in accordance with values of the video words for the first one of the bit ranks;

(c) detecting light from the light source;

(d) integrating the light detected after step (b) is conducted; and

(e) for a second one of the bit ranks of the video words for the first color component, turning pixels in said plurality of rows of the spatial light modulator on or off in accordance with values of the video words for the second one of the bit ranks when the integrated light reaches a predetermined value.

32. (previously presented) The method of claim 31, further comprising the step of changing the intensity of the light generated by the light source.

33. (previously presented) The method of claim 32, wherein the light source comprises a plurality of light emitters, and the step of changing the intensity comprises actuating at least one of the light emitters steadily and turning at least one other of the light emitters on or off.

34. (previously presented) A method for displaying a sequence of image frames described by video words, the video words having bits with different bit ranks, said method comprising the steps of:

(a) exposing a spatial light modulator to light generated by a light source;

(b) displaying the bit ranks of the video words describing a given frame of the sequence on the spatial light modulator in a predetermined order;

(c) displaying the bit ranks of the video words describing the next frame of the sequence on the spatial light modulator in a different order; and

(d) coloring the light to which the spatial light modulator is exposed with a rotating color wheel,

wherein the predetermined order of step (a) is an ascending order for each color, from least significant bits to most significant bits, and

wherein the different order of step (c) is a descending order for each color, from most significant bits to least significant bits.

35. (previously presented) the method of claim 34, further comprising varying the intensity of the light to which the spatial light modulator is exposed substantially.

Claim 36 (cancelled).

37. (previously presented) A method for displaying a first color component of an image described by video words for the first color component of a frame, the video words having bits with different bit ranks, from least significant bits to most significant bits, said method comprising the steps of:

- (a) exposing a spatial light modulator to light generated by a light source;
- (b) coloring the light to which the spatial light modulator is exposed with a rotating color wheel, the color wheel having at least one segment for the first color component;
- (c) displaying the least significant bits and the next-least significant bits of the video words for the first color component on the spatial light modulator during one revolution of the color wheel; and
- (d) displaying the most significant bits of the video words for the first color component on the spatial light modulator during at least two additional revolutions of the color wheel.

38. (previously presented) A method for displaying a colored image, comprising the steps of:

- (a) supplying a first set of data to a digital micromirror device having an array of pivotable micromirrors which have pivot axes, the pivot axes of some of the micromirrors being transverse to the pivot axes of others of the micromirrors;
- (b) exposing the digital micromirror device to light of a first color that impinges on the digital micromirror device from a first direction;
- (c) supplying a second set of data to the digital micromirror device;
- (d) exposing the digital micromirror device to light of a second color that impinges on the digital micromirror device from a second direction;
- (e) supplying a third set of data to the digital micromirror device; and
- (f) exposing the digital micromirror device to light of a third color that impinges on the digital micromirror device from a third direction.